WHAT IS CLAIMED IS:

1. A magnetic loss material comprising a soft magnetic powder and a binder binding the particles of the powder to one another, the magnetic loss material having a frequency dispersion profile of an imaginary part magnetic permeability (μ"), wherein the frequency dispersion profile comprises at least two different dispersion portions including a first dispersion portion (D1) at a relatively high-frequency side and a second dispersion portion (D2) at a relatively low frequency side, the imaginary part magnetic permeability (μ") having a first maximum value (μ''_{max} (D1)) that is the maximum within the first dispersion portion (D1) and a second maximum value (μ''_{max} (D2)) that is the maximum within the second dispersion portion (D2), the second maximum value μ''_{max} (D2) being equal to or greater than the first maximum value (μ''_{max} (D1)).

2. The magnetic loss material according to claim 1, wherein the frequency dispersion profile of an imaginary part magnetic permeability (μ") has the first and the second dispersion portions (D1 and D2) having mutually different dispersion frequency regions, the second dispersion portion (D2) at a low-frequency side being a dispersion owing to magnetic resonance.

3. The magnetic loss material according to claim 2, wherein the first dispersion portion (D1) at a high-frequency side is the dispersion owing to eddy current.

4. The magnetic loss material according to claim 2, wherein the first dispersion portion (D1) at a high-frequency side is the dispersion owing to magnetic resonance.

5. The magnetic loss material according to claim 1, wherein either of relationships of $\Delta fr'' \leq D1_{50}$ or $\Delta fr'' \leq D2_{50}$ is established, where Δfr" represents a difference between maximum frequencies (fr''_{max} (D1) and fr''_{max} (D2)) of the first dispersion portion (D1) and the second dispersion portion (D2), $D1_{50}$ represents

a full width half maximum of the first dispersion portion (D1), and $D2_{50}$ represents a full width half maximum of the second dispersion portion (D2).

6. The magnetic loss material according to claim 1, wherein said soft magnetic powder comprises first through (n+1)-th powders which are different from one another in any one of the composition, the particle size, or the particle shape and which are mixed to one another, the imaginary part magnetic permeability (μ") of said first powder having maximum value ($\mu''_{max}1$) at a first frequency (fr1), the imaginary part magnetic permeability (μ") of said (n+1)-th powder having maximum value ($\mu''_{max}(n+1)$) at a (n+1)-th frequency (fr(n+1)), the relationship of fr1 > fr(n+1) being established, and also the relationship of $\mu''_{max}1 < \mu''_{max}(n+1)$ being established, where n is equal to an integer not smaller than one.

7. The magnetic loss material according to claim 1, wherein said soft magnetic powder has a single kind of composition and a monotonous particle size distribution, and has two anisotropic magnetic fields having mutually different magnitudes.

8. The magnetic loss material according to claim 7, wherein said soft magnetic powder is an iron-aluminum-silicon alloy powder of a flat shape, has a specific surface area between $0.5m^2/g$ and $2.0m^2/g$, and is subjected to heat-treatment at a temperature of 500°C or more.

9. The magnetic loss material according to claim 7, wherein said soft magnetic powder is an iron-nickel system alloy powder of a flat shape and has a specific surface area between $0.3m^2/g$ and $0.4m^2/g$.

10. The magnetic loss material according to claim 7, wherein said soft magnetic powder is a metal-oxide powder of an indefinite shape and has a specific surface area of $1.5m^2/g$ or more.

11. The magnetic loss material according to claim 1, wherein said soft magnetic powder comprises a first particle group and a second particle group

each of which contains powder particles, the powder particles in said first particle group having a first size greater than a skin depth of said magnetic loss material, the powder particles in said second particle group having a second size smaller than the skin depth of the magnetic loss material.

12. The magnetic loss material according to claim 11, wherein ones of said powder particles are of an indefinite shape, each of said first and said second sizes being a diameter of each of said ones.

13. The magnetic loss material according to claim 11, wherein ones of said powder particles are of a flat shape, each of said first and said second sizes being a thickness of each of said ones.

14. The magnetic loss material according to claim 11, wherein each of said first and said second particle groups is obtained by grinding starting material powder of an indefinite shape having a thickness or a diameter which is greater than the skin depth.

15. The magnetic loss material according to claim 11, wherein the imaginary part magnetic permeability (μ") owing to the first particle group has a maximum value at a first frequency (fr1), the imaginary part magnetic permeability (μ") owing to the second particle group has a maximum value at a second frequency (fr2) which is lower than the first frequency (fr1).

16. A method of producing a magnetic loss material in which a frequency dispersion profile of an imaginary part magnetic permeability (μ") has first and second dispersion portions (D1 and D2) having mutually different dispersion frequency regions, the second dispersion portion (D2) at a low-frequency side being a dispersion owing to magnetic resonance, said method comprising:

preparing soft magnetic powder of an indefinite shape having a thickness or a diameter which is greater than a skin depth;

grinding said soft magnetic powder to obtain magnetic hybrid soft magnetic powder comprising a first particle group and a second particle group each of which contains powder particles of an indefinite shape or a flat shape, the powder particles in the first particle group having a thickness or a diameter which is greater than said skin depth, the powder particles in the second particle group having a thickness or a diameter which is smaller than said skin depth;

mixing a binder including a high molecular compound into said hybrid soft magnetic powder to obtain a mixture thereof; and

molding said mixture.